

ARMY ENGINEER DISTRICT, SACRAMENTO  
CORPS OF ENGINEERS  
SACRAMENTO, CALIFORNIA

SPK-02490  
Sep 84  
Revised Apr 89

TO: Architect-Engineers and District Personnel:

1. The attached revised guide specification supercedes the previous guide, PLANTING OF TREES, SHRUBS, GROUND COVERS AND LAWN AREAS, SPK-2H, dated September 1984, and is for use in the preparation of project specifications.

#### GENERAL NOTES

Para 1

Para 2

#### TECHNICAL NOTES

Para C

Para I

Para J

Para K

NOTE: A-E's should read all the TECHNICAL NOTES located at the beginning of

this guide specification and edit the specification accordingly.

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### GENERAL NOTES

1. This guide specification is to be used in the preparation of contract specifications in accordance with the Sacramento District Specification Manual. It will not be made a part of a contract merely by reference; pertinent portions will be copied verbatim into the contract documents.
2. Where numbers, symbols, words, phrases, clauses, or sentences in this specification are enclosed in the following manner: [ ], a choice or modification must be made; delete inapplicable portion(s) carefully. Where blank spaces occur in sentences, insert the appropriate data. Where entire paragraphs are not applicable, they should be deleted completely.

### TECHNICAL NOTES

- A. The section number will be inserted in the specification heading and prefixed to each page number in project specifications.
- B. Additional provisions of a similar nature which are needed for a particular project specification shall be added to this section.
- C. Paragraph 1.1: Numerous tests have indicated that the importation of topsoil that is structurally different from the existing soil on the areas to be seeded does not produce desirable results. The incorporation of soil amendments with fertilizer should be considered before requesting the importation of topsoil.
- D. Paragraph 1.2: Add common name of fertilizer, if applicable. Example: Commercial fertilizer, shall be ammonium phosphate and shall contain a minimum of 16% nitrogen, 20% phosphate and 0% potash, etc. Fertilizers are salts, and must be in solution for the plants to use them. Without adequate water, fertilizer can do more harm than good. Therefore, during drought periods the first application of fertilizer will be made by the using agency after establishment of the plants.
- E. Paragraph 1.3: Before specifying seed mixtures, the specification writer should consult the land management plan of the installation. In last column heading insert acre or 1,000 square feet. In accordance with DTL 1110-4-23, King Range Bluestein, a coarse range-type grass,

shall not be used as a vegetative ground cover in Air Force Designs.  
Insert common name of seed with the specific name in parenthesis.

- F. Paragraph 1.4: Choose the grass mixture that is available from commercial sod sources and that most closely matches the site requirements.

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- G. Paragraph 1.5: Under certain conditions hybrid Bermuda lawns or play areas may be desired. The stolons must be obtained from commercial turf nurseries to insure the planting of certified stolons that are true to name.
- H. Paragraph 1.6: Delete those soil amendments which are not called out specifically or given to the Contractor as an option. If it is known that good soil exists in the planting area, there is no need to specify soil amendments.
- I. Paragraph 1.6.1: When gypsum is specified, the average application is 2 ton/acre or 100 lbs./1,000 sq. ft. The depth of incorporation into the soil should be the same as the tillage depth.
- J. Paragraph 1.6.4: A maximum quantity of manure is 5 cu. yds. per 1,000 sq. ft. A lighter application of 3 cu. yds. per 1,000 sq. ft. is preferred as a safeguard against harmful salt accumulations in desert areas. It should be incorporated into the soil to a depth of 5 inches.
- K. Paragraph 1.6.5: When specifying this material quantities are variable. Average range of application is 2 to 5 cu. yds. per 1,000 sq. ft. The addition of fertilizer to sawdust is required. The recommended addition of fertilizer is 2 pounds of actual nitrogen per cubic yard of sawdust. This amount of fertilizer is in addition to the normal application of nitrogen required to increase the soil fertility. Re-fertilization every 45 days during the first two growing seasons is required.
- L. Paragraph 1.7: Other mulch material such as rock may be used if the Contractor secures prior confirmation from the Contracting Officer.
- M. Paragraphs 1.8.1 and 1.8.2: Fill the applicable blanks. Delete items which are not applicable.
- N. Paragraph 1.9: Some installations may charge the Contractor for water and/or restrict usage. This paragraph may read: "Water will be furnished by the Government at a nominal cost to the Contractor. When conditions of supply warrant, the Contracting Officer may place a limitation upon the quantity delivered per hour, and may restrict the time of irrigation to hours of off-peak usage." For isolated projects,

where the Contractor may be required to furnish non-government water, this paragraph should read: "Water shall be furnished by the Contractor, and shall be free of soil, acid, alkali, salt, and other substances that would be harmful to the growth of grass. The source shall be subject to approval of the Contracting Officer, prior to use.

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- O. Paragraph 8.1.5: Use 48 hours unless there is an overriding reason for another time.
- P. Paragraph 8.1.6: Where two supporting tree stakes are desired, this paragraph should be changed accordingly. A detail should also be drawn on the landscape drawing.
- Q. Paragraph 8.1.8: Do not incorporate inorganic fertilizer with the planting mixture. The quantity of fertilizer specified for trees shall not exceed 0.1 lb. of actual nitrogen per inch of trunk diameter. Shrub beds shall be broadcast fertilized at the rate of 2 to 4 lbs. of actual nitrogen per 1,000 sq. ft. If a soil amendment containing nitrogen has been used in the planting mixture, a lesser quantity of fertilizer would be required. [0.9 lb. of an 11-8-4 fertilizer equals 0.1 lb. of actual nitrogen.] Fertilizers shall not be specified during periods of prolonged drought.
- R. Paragraph 8.2.1: See comment for paragraph 1.1.
- S. Paragraph 8.2.2: Insert the quantity and type of soil amendment required.
- T. Paragraph 8.2.3: Additional fertilizer is not required if a soil amendment containing nitrogen has been previously specified. Fertilizers shall not be specified during periods of prolonged drought. Refer to note 5.
- U. Paragraph 9.1: When the areas to be topsoiled and/or seeded [stolonized or sodded] abut existing lawns or when a definite outline cannot be indicated on drawings, the areas should be described in this paragraph. For example: "The extent of project areas to be seeded shall be all ground surfaces scarred by construction operations."
- V. Paragraph 12.1: Top dressing mulches are generally not used on newly seeded lawn areas if a sprinkler system has been installed. If seed has been sown after June 1 in areas that have prolonged dry seasons, it is advantageous to apply a surface mulch of straw or peat moss or other mulch material.
- W. Paragraph 16.4: Fertilizers shall not be specified during periods of

prolonged drought. Refer to note 5.

- X. Paragraph 19: The maintenance period usually coincides with the maintenance period required for lawn establishment. Generally this is 30 to 45 days.



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## SECTION 02490

### PLANTING OF TREES, SHRUBS, GROUND COVERS AND LAWN AREAS

#### 1. MATERIALS (other than plants):

1.1 Topsoil: [Topsoil will be made available from stockpiles on the project site as specified in SECTION .] Any additional topsoil that is required shall be furnished by the Contractor from [approved sources on the military reservation from which it is to be stripped, as designated on the drawings or as directed by the Contracting Officer] [approved sources off the military reservation.] Topsoil shall be natural surface soil capable of producing satisfactory agricultural crops and shall be reasonably free of matter that might be harmful to plant growth or a hindrance to grading, seeding and maintenance operations.

1.2 Fertilizer: Commercial fertilizer shall contain a minimum of % nitrogen, % phosphate, % potash, be uniform in composition, dry and free flowing, delivered in containers labeled in accordance with applicable State regulations and bearing the warranty of the producer for the grade furnished.

1.3 Seed: Seed shall be labeled in accordance with U. S. Department of Agriculture Rules and Regulations under the Federal Seed Act in effect on the date of Invitation for Bids. Seed which has become wet, moldy, or otherwise damaged in transit or in storage will not be acceptable.

Kind of Seed	Lbs. per 1,000 Sq. Ft. *
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Lawn

Total (pounds per 1,000 sq. feet)
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\*Material other than seed of the designated species may contain weed seed not exceeding 0.5 percent of the aggregate weight of pure live seed and other material.

1.4 Sod shall be obtained from commercial sod nurseries. It shall be cut from level areas of mature grass containing a mixture of approximately percent and percent . The sod shall be cut in strips approximately 15 inches wide and 4 feet long. The sod shall be cut to leave 1/2- to 3/4-inch of soil attached to the roots.

1.5 Stolons shall be certified hybrid Bermuda stolons, variety . They shall be delivered to the job site in ice-packed containers in fresh condition and shall not have been harvested more than 24 hours prior to delivery.

Stolons shall be two to four inches long with a majority of fibrous runners and a minimum of green leaf. Stolons may be held on the job site if kept cool and moist for a period not longer than 24 hours.

#### 1.6 Soil Amendments:

1.6.1 Gypsum shall be agricultural grade sulphate of lime containing a minimum of 90 percent calcium sulphate, uniform in composition, dry and free flowing, and delivered to the site in containers bearing the warranty of the producer for the grade furnished.

1.6.2 Limestone shall be agricultural grade, ground to pass an 8-mesh sieve with 25 percent passing a 100-mesh sieve. Calcareous limestone shall contain not less than 50 percent calcium oxide, and dolomitic limestone shall contain not less than 40 percent magnesium oxide.

1.6.3 Peat moss shall be a natural product of either sphagnum moss, reed or sedge peat taken from a fresh water site. It shall be shredded or in granular form so that it can pass thorough a 1/2-inch screen and shall contain not less than 90 percent organic matter by weight on an oven-dry basis. It may be furnished in bulk or bales.

1.6.4 Manure shall be well rotted, weed free, pulverized and sterilized, and may be furnished in bulk.

1.6.5 Sawdust shall be mill-run hardwood or softwood, free of pieces of wood that would interfere with proper cultivation and contain not less than 2 pounds actual nitrogen per cubic yard.

1.6.6 Nitrolized fine ground bark (0" - 1/8") or nitrogen treated rice hulls or other locally available nitrogen treated organic materials.

1.7 Mulch shall consist of fine ground bark chips (1/8" - 3/8") on ground cover areas, and medium ground bark chips (3/8" - 1") on shrub areas and tree wells. At the Contractor's option, almond hulls or other locally available, acceptable organic material may be substituted for the bark chips on shrub beds and tree wells. Threshed straw of oats, wheat, barley, rye or rice free of mold shall be used on lawns.

1.8 Planting mix for tree and shrub planting pits shall be one of the following:

1.8.1 Contractor furnished and shall consist of     part[s]     to 3 parts friable topsoil.

1.8.2 The soil excavated from the plant pit combined and thoroughly mixed with amendments as follows:

part[s] well rotted pulverized manure to 3 parts soil, OR

part[s] [nitrolized ground bark soil conditioner, ] [nitrogen treated rice hulls] [peat moss] to 3 parts soil.

1.9 Water will be furnished without cost from the nearest available Government hydrant in the vicinity of the project.

1.10 Materials for Staking:

1.10.1 Stakes for supporting trees shall be sound wood capable of standing in the ground for 2 years. They shall be 2 x 2 inches and not less than 8 feet in length.

1.10.2 Ties: Material for holding tree to stake shall be canvas or galvanized wire within a rubber hose or heavy plastic tube which is long enough to protect the tree from the wire. Tie shall be placed around the tree, crossed, carried around the stake and securely nailed thereto.

2. PLANT MATERIALS:

of invoices for fertilizer, soil amendments and mulch material shall be furnished to the Contracting Officer.

4. STORAGE: Plants, seed, sod, sprigs, fertilizer and sterilants not installed or used on the day of arrival at the site shall be stored and protected as follows. Storage shall be in areas designated or as approved by the Contracting Officer.



4.1 Outside storage shall be shaded and protected from wind. Covering shall be such that air can circulate and heating will not develop.

4.2 Plants stored on the project shall be protected from drying out at all times by covering the balls or roots with moist sawdust, wood chips, shredded bark, peat moss, or other similar mulching material. Plants, including those in containers, shall be kept in a moist condition until planted. Bare root plants shall be heeled-in.

4.3 [Sod] [Sprigs] shall be sprinkled with water and covered with moist burlap, straw or other approved covering.

4.4 Seed, lime and fertilizer shall be kept in dry storage away from contaminants.

4.5 Soil sterilant shall not be stored with any other landscape materials.

5. INSPECTION: Government inspection of plant material may be made at the nursery or growing site, but such inspection shall not preclude rejections at the project site.

6. PLANTING SEASON: Bare-root plants shall be planted between the dates November 25 thru March 30. All other planting shall be done during the season or seasons which are normal for such work as determined by weather conditions and by accepted practice in the general locality of the project.

7. OBSTRUCTIONS BELOW AND ABOVE GROUND: Planting areas may be altered at the discretion of the Contracting Officer if large rocks or other underground obstructions are encountered that interfere with excavation for plants. When locations of underground utility lines are shown on the plans or have otherwise been made known to the Contractor, any damage to these lines during the planting operations will be repaired by the Contractor in an approved manner at no cost to the Government. Tree locations shall be modified as necessary to avoid interference with overhead or underground utilities.

## 8. PLANTING OPERATIONS:

### 8.1 Shrubs and Trees:

8.1.1 Preparation of Planting Areas: Planting of shrubs and trees should preferably take place after the area has been completely graded and before the lawns have been installed. If surrounding area is already turfed, it shall be covered in a manner that will satisfactorily protect it from damage. Damage to lawn areas shall be repaired and re-seeded with the same type of seed as

originally specified for that area.

8.1.2 Plant material locations and bed outlines shall be marked on the ground for approval prior to excavating the plant pits and beds. The Contracting Officer may adjust plant material locations to meet field

conditions. The Contractor shall give at least two days notice prior to the date desired for inspection by the Contracting Officer. Unless otherwise specified on the drawings, no shrub shall be planted less than 2 feet from a building or walk.

8.1.3 Excavation for Planting: Plant pits for shrubs shall be at least 8 inches wider and 8 inches deeper than the ball of earth in the container. Pits for trees shall be at least 2 feet wider and 12 inches deeper than the ball of earth in the container or the spread of the roots if bare-rooted.

8.1.4 Planting of Trees and Shrubs: Pits shall be backfilled with the planting mixture to the proper height to receive the plant and tamped firmly. Plants shall be set in an upright position in the center of planting pits. Planting mix shall be compacted around the ball or roots and thoroughly soaked with water. The crown of the plant shall be approximately level with the finished grade of the area outside the plant pit. Irrigation basins shall be provided for all shrubs in shrub beds. Trees shall have irrigation basins with a 36-inch minimum diameter and a 4-inch wall height.

8.1.5 Mulching of trees and shrubs: Tree wells and shrub beds that are not in the ground cover area shall receive a 1-1/2-inch to 2-inch layer of mulch material. Mulching shall take place within [48] hours after placing.

8.1.6 Staking: Trees shall be supported [by at least one stake.] [as indicated on the drawings.] The stake shall be driven into the ground to a minimum depth of 2 feet and the tree shall be fastened to the stake at heights of approximately 2-1/2 and 5 feet above the ground.

8.1.7 Pruning shall be limited to the minimum necessary for removal of injured twigs and branches, with cuts of 1/2-inch in diameter painted with a tree wound compound.

8.1.8 Fertilizing: Prior to the conclusion of the maintenance period, fertilizer shall be applied on the surface of the soil in a wide band around each tree at the rate of lb. per inch of diameter. Fertilizer shall not be applied against the stem. On shrub beds, fertilizer shall be broadcast at the rate of lb. per 1,000 sq. ft. The Contractor shall water thoroughly after applying the fertilizer.

## 8.2 Ground Cover Planting:

8.2.1 Topsoiling: Immediately prior to dumping and spreading topsoil, the subgrade shall be disked or scarified to a minimum depth of 2 inches to permit blending of the topsoil with the subsoil. The topsoil shall be spread evenly

to an average depth of      inches and a minimum depth of      inches.  
Planting beds shall be brought to a smooth even surface conforming to  
established grades after full settlement has occurred.

8.2.2 Soil Preparation: Ground cover areas shall receive an application of  
applied at the rate of      cu. yds. per 1,000 sq. ft., or, at the

Contractor's option, at the rate of cu. yds. per 1,000 sq. ft.  
The soil shall be thoroughly tilled to a depth of 6 inches and then raked or harrowed until level and smooth.

8.2.3 Fertilizing: Commercial fertilizer [ percent Nitrogen, percent Phosphate, percent Potash] shall be distributed uniformly at the rate of lbs. per 1,000 sq. ft. and shall be incorporated into the soil to a maximum depth of 2 inches. The incorporation of the fertilizer may be a part of the tillage operation.

8.2.4 Grading: The finished surface shall be 1 to 1-1/2 inches below walks and divider strips so that surface mulch will be contained within the ground cover area.

8.2.5 Spacing of ground cover shall be as noted on the landscape drawing. Ground cover plants shall be planted around the shrubs within the ground cover area, as well as in the open areas specified.

8.2.6 Mulching of Ground Cover: Ground cover areas shall be mulched with a 1-inch layer of fine ground bark chips or at the Contractor's option. The mulch shall extend around shrubs and trees that are planted in the ground cover area.

## 9. SOIL PREPARATION FOR LAWNS:

9.1 General: The outline or extent of project areas to be [topsoiled and] seeded [sprigged] [sodded] shall be as indicated on the drawings.

9.2 Debris Removal: Prior to [topsoil and] tillage operations, all wire, rubbish and other material which might hinder proper grading, and subsequent maintenance shall be removed from the site and disposed of as directed.

9.3 Grading: [Subgrades] [Grades] on the areas to be [topsoiled] and seeded shall be maintained in a true and even condition. Maintenance shall include necessary repairs to previously graded areas. Where the [subgrades] [grades] have not been established, the areas shall be graded as shown on the drawings [with allowances for depth of topsoiling] and left in an even and firm condition. On lawn areas, the finished grade after shrinkage and compaction shall be 3/4- to 1-inch below the grade of adjoining walks, curbs or other paved surfaces prior to seeding operations. If area is to be sodded, the finished grade prior to sodding shall be 1-1/2 inches lower than adjoining paved surfaces or header boards.

## 10. PLANTING OF SEED:

10.1 Time of Seeding: Seeding shall be done during the season or seasons which are normal for such work, as determined by weather conditions and accepted practice in the general locality of the project. The seeding operation shall be halted when, in the opinion of the Contractor's Quality Control Inspector, conditions of high winds, excessive moisture or other

factors are not conducive to satisfactory results. Upon written request of the Contractor, and upon written approval, planting may be done during the off-seasons provided that:

10.1.1 The resulting stand of grass shall be at least equal to the stand that might be expected from planting during the normal season; and

10.1.2 The establishment period shall be lengthened, as required, to produce the above specified stand at no additional cost to the Government.

10.1.3 Fertilizer - fertilizer as specified shall be distributed uniformly at the rate of      lbs per 1000 sq. ft. and shall be incorporated into the soil to a maximum depth of 2 inches. The incorporation of the fertilizer may be part of the tillage operation.

## 10.2 Method of Seeding:

10.2.1 Broadcast Seeding: Seed shall be broadcast uniformly by hand, mechanical hand seeder, combination seed spreader and cultipacker, or other approved equipment at the rate specified in the paragraph, "Materials". Where seed is broadcast by hand or mechanical hand seeder, half the seed shall be sown with the sower moving in one direction, and the remainder sown with the sower moving at right angles to the first sowing. Where mulch is not used, seed shall be covered to a depth of 1/8-inch to 1/4-inch by means of a chain harrow, cultipacker, rake, or other approved device. Broadcast seeding shall not be done during windy weather.

10.2.2 Drill seeding [not permitted on lawn areas] shall be done with approved equipment with drills set not more than 4 inches apart. The seed shall be drilled uniformly over the designated areas to a depth of 1/4 inch to 3/4 inch at the rate specified in the paragraph "Materials".

10.2.3 At the Contractor's option, the seed and fertilizer may be mixed with a specially prepared dyed wood cellulose fiber and water to form a slurry. The slurry shall be mixed in tanks having continuous agitation so that a homogenous mixture is discharged hydraulically through hoses on the areas to be seeded. Seed and fertilizer shall be applied at the rates previously specified. The wood fiber mulch in suspension shall be applied at rates of 1,000 to 1,400 pounds per acre.

10.3 Inspection of Seeding: If inspection indicates that areas have been skipped or seeded at less than the specified rate, the Contracting Officer may require the sowing of additional seed on these areas.

11. COMPACTING: Immediately after seeding, the entire area shall be compacted by means of a cultipacker or roller weighing 60 to 90 pounds per linear foot of roller. If a combination seeder and cultipacker is used, additional compaction is not required. Compacting shall not be done where mulch has been applied in a hydraulically applied slurry.



## 12. APPLICATION OF MULCH:

12.1 Lawn Areas Only: Immediately following seeding and compaction, a top dressing of      shall be uniformly applied to provide a continuous blanket 1/4-inch thick after being wetted. At the Contractor's option,      may be substituted maintaining the same depth of application as above.

13. PROTECTION: Areas susceptible to vehicular or heavy foot traffic shall be protected by erecting suitable barricades immediately after seeding is completed and/or by placing warning signs of a type approved.

## 14. SOD INSTALLATION [Contractor's Option]:

14.1 Sod shall be laid with closely fitted joints on a smooth, level surface which has been prepared as previously specified. Ends of strips shall be staggered. On irregular areas, sod shall be laid in both directions from the longest straight line that can be drawn through the area.

14.2 Compaction: After a light initial watering immediately after installation, the sod shall be rolled to eliminate all irregularities.

14.3 Irrigation: After compaction, the sodded area shall be watered thoroughly to a depth of at least 8 inches.

## 15. PLANTING AND CARE OF BERMUDA GRASS STOLONS:

15.1 Time of Stolonizing: Stolons shall be planted between the dates of April 15 and September 1. They may be planted prior to and after these dates provided that creeping red fescue is over-seeded at the rate of 2 pounds per 1,000 sq. ft.

15.2 Rate of Application: Stolons of      shall be distributed at the rate of 4 bushels per 1,000 square feet.

15.3 Method of Application: On the prepared soil surface, stolons shall be evenly distributed and simultaneously pressed into the soil by means of a stolon planting machine. The machine shall be adjusted to bury at least 75 percent of the stolons 1/2 inch to 1-1/2 inches deep.

15.4 Irrigation: At no time after planting shall stolons be subjected to drying conditions. Stolons shall be kept constantly moist until germination

(7 to 12 days). Newly planted areas shall receive the initial irrigation within the following schedule:

At 100 degrees F - 15 minutes after planting

90	"	- 20	"	"	"
80	"	- 30	"	"	"
70	"	- 1 Hour	"	"	"
60	"	- 2 Hours	"	"	"

15.5 Inspection: Prior to planting the stolons, the Contracting Officer shall approve the site for grade and compaction.

15.6 Maintenance: The Contractor will be responsible for the watering of the stolonized area for a period of 30 days after planting.

#### 16. ESTABLISHMENT (Lawn areas only):

16.1 Period: The Contractor shall be responsible for the proper care of the seeded areas [for a period of      days after the completion of the seeding [stolonizing of the entire project] [until the grass reaches the mowing height specified below]. If the desired cover is established in less time, shortening of the period of responsibility may be authorized by the Contracting Officer. On lawns established by means of sodding, the period of responsibility shall be 14 days after the completion of the sodding operations.

16.2 Watering: The seedbeds shall be watered immediately after compacting and kept constantly moist during the period of the Contractor's responsibility. Water shall be applied in a fine spray so as not to gully the soil or disturb the uniform thickness of the top dressing.

16.3 Mowing: New grass on the seeded areas shall be mowed with approved equipment to a height of 1-1/2 inches whenever the average height of the grass reaches 2-1/2 inches. Areas that have been stolonized shall be mowed to a height of 1/2 inch, three weeks after planting during the preferred planting period.

16.4 Re-fertilization: After the first mowing,      fertilizer shall be spread uniformly over the lawn area when the grass is dry, at the rate of lbs. per 1,000 sq. ft. Immediately following the application of the

fertilizer, the seeded areas shall be thoroughly watered.

17. REPAIR:

17.1 General: When any portion of the ground surface becomes gullied or otherwise damaged following seeding within the period of the Contractor's

responsibility, the affected portion shall be repaired to re-establish the condition and grade of the soil prior to planting and shall then be reseeded as specified for initial planting, all at no additional cost to the Government.

17.2 Re-Seeding: When it becomes evident that the expected stand of grass will not be produced on certain areas, the Contracting Officer will require that these areas be re-seeded with the same seed and quantity as specified for the initial seeding. Re-seeding shall be completed within      days following notification and these areas shall be maintained by watering and mowing as specified above until the acceptable lawn is established.

17.2.1 Re-Sodding: If it becomes evident that portions of the sodded areas have not rooted, these areas shall be replaced with sod of the same grass composition as originally specified. Re-sodding shall be completed within 7 days following notification by the Contracting Officer.

17.2.2 Re-Stolonizing: The Contractor shall be required to repair all stolonized areas that have not been covered by growing stolons of the variety planted within 60 days after planting. Repair shall consist of planting the same variety of stolons or by laying sod of the same variety.

17.3 Areas repaired as a result of damage occurring through no fault of the Contractor shall be maintained only until the termination of the establishment period specified in paragraph, "Establishment".

18. CLEAN-UP: Lawns and paved areas shall be cleaned of all planting debris and soil. Lawn areas that have been damaged during planting operations shall be brought to true grade and re-seeded with the same lawn mixture as the original lawn.

19. MAINTENANCE: The Contractor will be responsible for maintenance of plants for a period of      days. Maintenance shall include watering, weeding, spraying, pruning, re-setting plants to proper grade or upright position, and restoration of planting basins when required.

20. GUARANTEE AND REPLACEMENT: The Contractor will be required to guarantee that the planted stock will live and grow for a period of 90 days following completion of all planting. At the conclusion of the 90-day period, the Contracting Officer will inspect the work and may require the Contractor to replace any plant that is in a badly impaired condition. Replacements shall be made in the same manner as specified for the original planting and at no extra cost to the Government.

21. CONSTRUCTION QUALITY CONTROL: Attention is directed to SECTION: CONSTRUCTION QUALITY CONTROL which requires the Contractor to perform quality control inspection, testing, and reporting.

\* \* \* \* \*

- REMINDER -

Located at the front of these specifications are the Contract Clauses, Special Clauses and Division I GENERAL REQUIREMENTS of the Technical Specifications, which apply to every aspect of this contract including the work in this section whether performed by Prime Contractor, subcontractor, or supplier.